

APPARATUS AND METHOD FOR HANDLING LENS CARRIERS

ABSTRACT

5 Novel methods and apparatus are disclosed for handling carriers for soft contact lenses in a lens manufacturing system. In accordance with a first aspect of the invention, article handling devices are located beneath a pre-cure station and a curing station of the system to move lens carriers within those stations. As a result of locating these devices beneath these stations, the desired movement of the carriers can be achieved without increasing
10 the footprint of the station. Pursuant to a second aspect of the invention, a complete set of assemblies is provided for moving a multitude of lens carriers into, through, and out from the pre-cure station and the curing station. This set of assemblies accomplishes this movement in a completely automated, high speed, mass production basis. In accordance with a third aspect of the invention, the curing station is provided with an intelligent
15 buffer. This buffer allows the lens carriers to accumulate in the curing station, and then discharges the carriers from the station in an ordered manner at the appropriate time. This enables the output or throughput of the curing station to be controlled or adjusted to accommodate changing conditions or circumstances occurring in the manufacturing system downstream of the curing station.